

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of: PAIGE et al

Application No.: 09/429,331

Filed: October 28, 1999

For: METHOD OF PREDICTING THE ABILITY OF ...

Art Unit: 1627

Examiner: T. Wessendorf

Washington, D.C.

Atty.'s Docket: PAIGE=1D

Date: February 27, 2001

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THE COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

Sir:

Transmitted herewith is a [ ] Amendment [XX] Supplemental Response to "Sequence Listing" Requirement, revised pages 1 and new pages 79-90 of Sequence Listing; substitute CRF; substitute specification page 237; page 152 of PCT/US99/06664; copy of stamped postcard receipts

in the above-identified application.

- [ ] Small Entity Status: Applicant(s) claim small entity status. See 37 C.F.R. §1.27.  
[ ] No additional fee is required.  
[ ] The fee has been calculated as shown below:

	(Col. 1)		(Col. 2)	(Col. 3)
	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NO. PREVIOUSLY PAID FOR	PRESENT EXTRA EQUALS
TOTAL	*	MINUS	** 20	0
INDEP.	*	MINUS	*** 3	0
FIRST PRESENTATION OF MULTIPLE DEP. CLAIM				

SMALL ENTITY	
RATE	ADDITIONAL FEE
x 9	\$
x 40	\$
+ 135	\$
ADDITIONAL FEE TOTAL	
	\$

OTHER THAN SMALL ENTITY	
RATE	ADDITIONAL FEE
x 18	\$
x 80	\$
+ 270	\$
TOTAL	
	\$

- \* If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3.  
\*\* If the "Highest Number Previously Paid for" IN THIS SPACE is less than 20, write "20" in this space.  
\*\*\* If the "Highest Number Previously Paid for" IN THIS SPACE is less than 3, write "3" in this space.

The "Highest Number Previously Paid For" (total or independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment of the number of claims originally filed.

[XX] Conditional Petition for Extension of Time

If any extension of time for a response is required, applicant requests that this be considered a petition therefor.

[ ] It is hereby petitioned for an extension of time in accordance with 37 CFR 1.136(a). The appropriate fee required by 37 CFR 1.17 is calculated as shown below:

Small Entity  
Response Filed Within  
[ ] First - \$ 55.00  
[ ] Second - \$ 195.00  
[ ] Third - \$ 445.00  
[ ] Fourth - \$ 695.00  
Month After Time Period Set

Other Than Small Entity  
Response Filed Within  
[ ] First - \$ 110.00  
[ ] Second - \$ 390.00  
[ ] Third - \$ 890.00  
[ ] Fourth - \$ 1390.00  
Month After Time Period Set

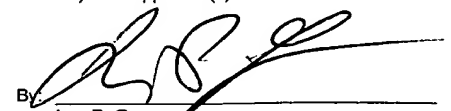
[ ] Less fees (\$ ) already paid for month(s) extension of time on .

- [ ] Please charge my Deposit Account No. 02-4035 in the amount of \$ .  
[ ] Credit Card Payment Form, PTO-2038, is attached, authorizing payment in the amount of \$ .  
[ ] A check in the amount of \$ is attached (check no. ).

[XX] The Commissioner is hereby authorized and requested to charge any additional fees which may be required in connection with this application or credit any overpayment to Deposit Account No. 02-4035. This authorization and request is not limited to payment of all fees associated with this communication, including any Extension of Time fee, not covered by check or specific authorization, but is also intended to include all fees for the presentation of extra claims under 37 CFR §1.16 and all patent processing fees under 37 CFR §1.17 throughout the prosecution of the case. This blanket authorization does not include patent issue fees under 37 CFR §1.18.

BROWDY AND NEIMARK

Attorneys for Applicant(s)

By:   
Iver P. Cooper  
Registration No. 28,005

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Telephone: (202) 628-5197

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PAIGE et al	)	Examiner: T. Wessendorf
Appln. No.: 09/429,331	)	Washington, D.C.
Filed: October 28, 1999	)	February 27, 2001
For: METHOD OF PREDICTING THE	)	Atty.Docket: PAIGE-1D
ABILITY OF COMPOUNDS TO	)	
MODULATE THE BIOLOGICAL	)	
ACTIVITY OF RECEPTORS	)	

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**SUPPLEMENTAL RESPONSE TO "SEQUENCE LISTING" REQUIREMENT**

Honorable Commissioner of Patents  
Washington, D.C. 20231

Sir:

Supplementing the response filed February 20, 2001,  
please further amend the application as follows:

IN THE SPECIFICATION

At page 162, line 34, replace "K = C or T" with  
--K = G or T--.

Please replace the present page 237 with the  
enclosed substitute page, which provides SEQ ID NOs:316-360  
for the sequences on this page. If there was no page numbered  
"237" in the application as filed, please insert this page  
between pages "236" and "238".

The enclosed "Sequence Listing" pages 1 and 79-90 replace pages 1 and 79 of the "Sequence Listing" submitted February 20, 2001.

#### REMARKS

1. At the time the February 20, 2001, response was prepared, counsel's file copy of the specification was missing page 237. Hence, the sequences appearing on that page were not incorporated into the Sequence Listing filed on that date.

Since counsel received a postcard receipt (copy enclosed) acknowledging the filing of a 293 page specification, counsel assumes that page 237 was missing only from counsel's file copy and not from the original filed with the PTO.

If counsel is mistaken, inserting page 237 at this time does not constitute the addition of "new matter". At page 1, lines 3-10, it is stated:

This application is a continuation-in-part of PCT/US99/06664, filed March 26, 1999, which is a continuation-in-part of 60/115,345, filed January 8, 1999, which is a continuation-in-part of Paige et al., Serial No. 60/099,656, filed September 9, 1998, which is a continuation-in-part of Paige et al., Serial No. 60/082,756, filed April 23, 1998. All of the above applications are hereby incorporated-by-reference.

Page 237 of this application sets forth Table 1, and part of Table 2. It is identical to page 152 of the above-

identified, incorporated-by-reference PCT application. Hence, even if inadvertently omitted from this application as filed, it can be provided without adding "new matter".

2. At page 162, we correct an obvious typographical error in the identification of ambiguous nucleotide "K", which denotes "G" or "T", not "C" or "T". See MPEP §2422, page 2400-20, Table 1. The NNK codon, specified at page 162, line 33, encodes all 20 amino acids. If the third position were C/T (Y), instead of G/T (K), then Met (ATG), Trp (TGG), Ser (TCA, TCG), Gln (CAA, CAG), Lys (AAA, AAG) and Gly (GAA, GAG) would not be encoded, inconsistent with the identification of X in LXXLL (page 162, line 29) as "any AA".

3. Applicants hereby submit the following:

[XX] an amendment to the paper copy of the "Sequence Listing" submitted on February 20, 2001, the amendment being in the form of substitute pages 1 and 79 and new pages 80-90;

[XX] the Sequence Listing in computer readable form, complying with §1.821(e) and §1.824, including, if an amendment to the paper copy is submitted, all previously submitted data with the amendment incorporated therein;

[XX] 4. The description has been amended to comply with §1.821(d).

5. The undersigned attorney or agent hereby states as follows:

- (a) this submission is not believed to include new matter [§1.821(g)];
- (b) the contents of the paper copy (as amended, if applicable) and the computer readable form of the Sequence Listing, are believed to be the same [§1.821(f) and §1.825(b)];
- (c) if the paper copy has been amended, the amendment is believed to be supported by the specification and is not believed to include new matter [§1.825(a)]; and

Respectfully submitted,

BROWDY AND NEIMARK  
Attorneys for Applicant(s)

By: 

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Enclosures:

Paper Sequence Listing pp. 1,4 and 79-90  
Substitute CRF  
Substitute page 237  
Page 152 of PCT/US99/06664  
Copy of stamped postcard receipts

FILED: 28 October 1999

APPLICANT(S): PAIGE et al.

THE PATENT AND TRADEMARK OFFICE STAMP HEREON  
ACKNOWLEDGES RECEIPT OF THE ABOVE-IDENTIFIED  
APPLICATION, INCLUDING THE FOLLOWING PAPERS:

☐ FEES \$ \_\_\_\_\_ (CH. # \_\_\_\_\_)

- ☐ RULE 60 CONTINUATION, WITH:
- ☐ COPY OF ORIGINAL APPLICATION (\_\_\_\_\_ pages)
  - ☐ COPY OF ORIGINAL DECLARATION
  - ☐ COPY OF ORIGINAL DRAWINGS (if any) (\_\_\_\_\_ sheets)

- ☐ RULE 60 DIVISIONAL, WITH:
- ☐ COPY OF ORIGINAL APPLICATION (\_\_\_\_\_ pages)
  - ☐ COPY OF ORIGINAL DECLARATION
  - ☐ COPY OF ORIGINAL DRAWINGS (if any) (\_\_\_\_\_ sheets)

- ☐ RULE 62 ☐ CONTINUATION  
(Abandon ☐ DIVISIONAL  
Parent) ☐ CONTINUATION-IN-PART

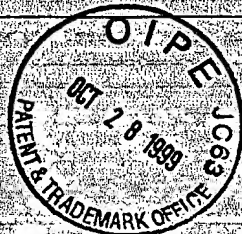
- ☐ INT'L PCT. APPLN. (\_\_\_\_\_ pages)  
☐ APPT. OF AGENT ☐ FEE CALCULATION SHT.

- ☐ U.S. NAT'L PHASE OF INT'L APPLN. (\_\_\_\_\_ pages)  
☐ OTHER \_\_\_\_\_

B&N-4

DOCKET NO. PAIGE=10 (Novel)

[PARENT CASE: \_\_\_\_\_]



- ☒ NEW ORIGINAL APPLICATION  
☒ 293 pages
- ☐ CONTINUATION-IN-PART
- ☐ DESIGN APPLICATION
- ☐ PLANT PATENT APPLICATION
- ☒ 29 SHEETS OF DRAWINGS 21 FIG(S)
- ☒ TRANSMITTAL LETTER
- ☐ PRELIMINARY AMENDMENT
- ☐ SMALL ENTITY STATEMENT(S)
- ☐ INFORMATION DISCLOSURE
- ☐ PRIORITY DOCUMENT(S)
- ☐ ASSIGNMENT
- ☐ DECLARATION

Initials: Bcs

FILED: 28 October 1999

APPLICANT(S): PAIGE et al.

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- ☐ RULE 62 ☐ CONTINUATION  
(Abandon ☐ DIVISIONAL  
Parent) ☐ CONTINUATION-IN-PART

- ☐ INT'L PCT. APPLN. (\_\_\_\_\_ pages)  
☐ APPT. OF AGENT ☐ FEE CALCULATION SHT.

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- ☐ DECLARATION

Initials: Bcs

Table 1

Peptides the Bind to the Unliganded (unactivated)  
Estrogen Receptor

	Sequence	SEQ ID NO.	Phage #
5	S R W E S P L G T W E W S R	316	4
	S A A P R T I S H Y L M G G	317	48
	S S W V R L S D F P W G V S R	318	1
	S S W D R L S D F P W G V S R	319	2
	S S W I R L R D L P W G E S R	320	3
10	S S W V L L R D L P W G S R	321	31
	S S W V V L R D L P W G S R	322	29
	S S C K W Y E K C S G L W S R	323	7
	S S G I C F F W D G C F E S R	324	35
	S R N L C F F W D D E Y C S R	325	41
15	H H H R H P A H P H T Y G G	326	47

Table 2

Peptides that Bind to the Estradiol Activated  
Receptor

	Sequence	SEQ ID NO.	Phage #
20	S R A G L L S D L L E G K S R	327	1/2
	S S R S L L R D L L M V D S R	328	6
	S S N K L L Y N L L K M E S R	329	22
	S S K S L L L N L L S T P S R	330	23
	H S F P R E S L L V R L L Q G G	331	42
25	S R L E M L L R S E T D F S R	332	3
	S R L E E L L K W G S V T S R	333	11
	S R L E Q L L K E E F S Y S R	334	21
	S R L E Q L L R S E P D F S R	335	27
	S R L E D L L R A P F T T S R	336	28
30	S R L E S L L R F G Q L D S R	337	29
	S S R L L S L L V G D F N S R	338	19/20
	S R L E E L L L G T N R D S R	339	30
	S R L K E L L L L P T D L S R	340	15
	S R L E C L L E G R L N C S R	341	34
35	S S K L Y C L L D E S Y C S R	342	35
	S R L S C L L M G F E D C S R	343	36
	S S K L I R L L T S D E E L S R	344	37
	S S R L M E L L Q E G Q G W S R	345	40
	S S N H Q S S R L I E L L S R	346	4
40	S S R L W Q L L A S T D T S R	347	16
	S S N S M L W K L L A A P S R	348	13/14
	S S K T L W R L L E G E R S R	349	17
	S R A G P V L W G L L S E S R	350	32
	S S L T S R D F G S W Y A S R	351	5
45	S S W V R L S D F P W G V S R	352	24/25
	S S E Y C F Y D S A H C S R	353	33
	S R S L L E C H L M G N C S R	354	7
	S S E L L R W H L T R D T S R	355	8
	S R L E Y W L K W E P G P S R	356	12
50	S R S D S I L W R M L S E S R	357	31
	S S K G V L W R M L A E P V S R	358	38/39
	H S H G P L T L N L L R S S G G	359	41
	S S A G G G A P A G S T P S R	360	26

Table 1

Peptides the Bind to the Unliganded (unactivated)  
Estrogen Receptor

	Sequence	Phage #
5	S R W E S P L G T W E W S R	4
	S A A P R T I S H Y L M G G	48
	S S W V R L S D F P W G V S R	1
	S S W D R L S D F P W G V S R	2
	S S W I R L R D L P W G E S R	3
10	S S W V L L R D L P W G S R	31
	S S W V V L R D L P W G S R	29
	S S C K W Y E K C S G L W S R	7
	S S G I C F F W D G C F E S R	35
	S R N L C F F W D D E Y C S R	41
15	H H H R H P A H P H T Y G G	47

Table 2

Peptides that Bind to the Estradiol Activated  
Receptor

	Sequence	Phage #
20	S R A G L L S D L L E G K S R	1/2
	S S R S L L R D L L M V D S R	6
	S S N K L L Y N L L K M E S R	22
	S S K S L L L N L L S T P S R	23
	H S F P R E S L L V R L L Q G G	42
25	S R L E M L L R S E T D F S R	3
	S R L E E L L K W G S V T S R	11
	S R L E Q L L K E E F S Y S R	21
	S R L E Q L L R S E P D F S R	27
	S R L E D L L R A P F T T S R	28
30	S R L E S L L R F G Q L D S R	29
	S S R L L S L L V G D F N S R	19/20
	S R L E E L L L G T N R D S R	30
	S R L K E L L L L P T D L S R	15
	S R L E C L L E G R L N C S R	34
35	S S K L Y C L L D E S Y C S R	35
	S R L S C L L M G F E D C S R	36
	S S K L I R L L T S D E E L S R	37
	S S R L M E L L Q E G Q G W S R	40
	S S N H Q S S R L I E L L S R	4
40	S S R L W Q L L A S T D T S R	16
	S S N S M L W K L L A A P S R	13/14
	S S K T L W R L L E G E R S R	17
	S R A G P V L W G L L S E S R	32
	S S L T S R D F G S W Y A S R	5
45	S S W V R L S D F P W G V S R	24/25
	S S E Y C F Y D S A H C S R	33
	S R S L L E C H L M G N C S R	7
	S S E L L R W H L T R D T S R	8
	S R L E Y W L K W E P G P S R	12
50	S R S D S I L W R M L S E S R	31
	S S K G V L W R M L A E P V S R	38/39
	H S H G P L T L N L L R S S G G	41
	S S A G G G A P A G S T P S R	26